Pocket Notebook
PN 20-08-04 (1920)

This notebook dates from August - October 1920. The pocket notebook contains notes by Thomas A. Edison relating to experiments with chemicals, electro cleaning solutions, phonograph records, storage batteries, reproducers, chalk telephones, wax masters, diamonds, rubber and Blue Amberol cylinder records.

PN-20-08-04 ☆2996

EDIS 223910

Consonance Vibration Numbers which can sound together without harshness due to Beats.

Octave 1-2 5th 2-3 4th 3-4
Major 3rd 4-5 Minor 3rd 5-6
Major 6th 3-5
Minor 6th 5-8

We should have Piano duets on disc

Cu layer of flake is 8325 Mil amp Seconds per sqr in Ni 37300.

When ready patent Ford Starter type of battery in England France Germany. Sweeden Canada Italy

About 3000 Diamond points put in Monthly in returned Reproducers of which 75% are worn bal broken Cost $85000 year Diamond at $2.50

Try Antny Sulfide Fe powdered in NaOH cold heat or less. to get an Oxide for H reduction

Why can't OOS stock be used for pocket linings of OOBS

Make some Trichlorophenol Chalko see if makes record or useful otherwise

---

Aug 4/20

Ask Lichty if Wyeth will make a good Model Machine for Storage Battery — No

---

Expmt to get a Electro cleaning Sol that when alkaline gives no deposit — Black deposit probably iron in soda & Na Sulphate.

Sample Mn wad from Caleb G Collins Kellys Ford Virginia good Cobalt Assay conc by Tumbling Barrell

Quartz with wad in seams & stains

Supposed to assay

Cobalt	4.5%
Ni	4.0
Ag	8 oz ton
Cobalt	0.95
Ni	0.16
Ag	7/10 oz
Cu	0.41

assays really

Silica 68
Fe_2O_3 2.9
Al_2O_3 9.43
Mn_2O_3 9.4
MgO } trace
CaO }
Undetermined, Water & Alkalis

We have many moulds rejected for Bent Generally females (coke) Reason is they are too thin Wkg females should be thickest of all Moulds + should go ½ hours even on 15@16 amps as they are used so much.

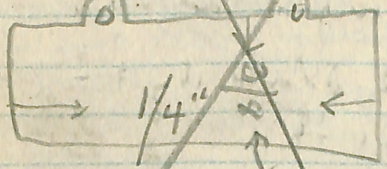
Walter Miller - Make 3 plans backed. Records dif way - quick - to Cry Silver Plating + 8/4 - also clips due to go thru full process of test surface + number of plants

We had a man named Tommy Junsted, who works for Luhr he was in chg of furnishing Dept. in Disc years ago but didnt like the girls = Is good Machinist Moore says good man for Lathe dept.

get Rikers ~~Cy~~ roll.

look at fine dent ~~Discard~~

Fuller Cloth



Shrink Wet + Dry

general average by spectroscope of Mallonyo 12 samples 8 unmarked ground together to 100 mesh - ½ 4.08 2½ 0 well check by rgg assay Samples 1 to 8 = deng 7/20

press nearly dehydrated $CuSO_4$ Klein brown see if makes a porous CuO Plate

Model Plate separator Y&G has given one lb per hour.

Try phosphorus dissolved in olive oil etc to coat silver for electroplating - ditto Bromine water, Iodine + Se too slow

LiOH is a weak alkali, it very likely a lot of things will form a battery all insoluble in LiOH. which covered by Soluble in KOH or NaOH, then opening up a new field.

see if Crystalized $CuOH_2$ is soluble in LiOH

CuOxyfluoride made

Ferrites for battery use very promising in thin layers - Ferrite of Barium very stable, Can be boiled Without decomp

Using 4 stage Amplifier + delicate Microfone see how far jars can be eliminated by Rubber sponge

Mn peroxide forms compounds with Ca - probably also Ba + Sr - Lefaudes depolz -

Vanadate Ca Sr Ba neutral alkali High Ox Vanadate might act as depolzr

Plate grafolyzed lead with Sb, or Bi

Make some of the LiOH very fully porous $Ni(OH)_2$ for Nanly & for a test cell at 5 Bat 2 may be by increasing A 4 Tg A 5 we could use it + that instead of cell lasting 4 @ 5 yrs it perhaps would not fill up & it would last for many more years -

Try Balmain paint under deep reproducer to see point to which it peels in a rather darkened room

see Hayes about making his Malchinups after Moulds are made

Osmotic pressure increases with Temperature - Try Chalk phone diff temps

Hayes May 7 ordered a song duet from Wedding bells - May 10 asking about Hymns

(11) Envelope self adjusting 2 signals 1/16 scale

Copper washer dies in chalk form
melted platina across Keller
try many metals. The continues
Current also Vend good, doubles
Vol – seems to want a depolyzer

Catalogue May 20 1920 has
1139 Records 2278 Selections
includes 50 foreign language records

Wax Masters plated 9 hours then go
to Gen 6 bath for 4 days. Then stripped
from Wax in Lathe room. Then Turned
2 Celluloid prints made, then do put in
Vault.

New records. Masters out of Vault go
to treatment Dept. thence to preliminary
room for 3 hour deposit of Cu then
to Gen 6 bath for 3 days. ? ?
Dempsey does labels. ? ?

Diamonds – 1 cleaning + 2 shaving stones
1 hour per 1000 –
Blast stones with No 5 shot 1000
Lost holder + wax wires 2½ min Each
plating 100 in 60 hours
grinding No 1 to size 4 minutes Each
Uncovering stones, 3 min each
Rough grinding 8½ min each
flattening ½ min
Reducing size setting 1 min each
Rounding + polishing 20 min

Eaton says a Concern in Newark has
2 german inside lapping machines
imported before the war + they
ground very rapid –
says present Lap (inside) spatters
some on large size but not on
small ones – wants to make another
machine. Find out who has these
Laps in Newark.

White sediment over Rubber baths.
PbO 38.%
CuSO4 12.%
SiO_2 25
Al_2O_3 7
Loss ignition 14%

CuSO4 – 25 cc acetic to Liter 2" strip
300 M.A rate – 2 hours
Spec g 1.180 1.170 1.160 1.140 1.120
1.090 + 1.080. all good plating

Lab can supply treatment dept
with distilled water.

Old men in plating = John McCartney
Pearsall. now at Silver Lake,
Nick Pongina now in Newark
made all the grafite last 2 yrs

Werner top floor foreman 60 week

Have Vermylne report on
Boonton WP

Present Copper bath Aug 8/20

2.67 grms Ni per Liter =
7.04 $NiSO_4$ =
11.97 $NiSO_4 6H_2O$ =
62.4 Copper

Nickel vs. 4% of Cu + Ni Content

Dear Maxwell Mumbert & Charles
New first rate -

Things in Progress

1 = Improved Leland - plates & Voltage
2 Dry Lelands - ditto portable wet
3 Ford Starter -
4 new Disc - Dolly
5 - Audion Battery
6 Draf Apparatus
7 sheet Nickel Articles
8 Ni from Sudbury ore process
9 Long funnel recording
10 Molded Cabinet furniture
11 Electroplate,
12 Increase Capacity A4
13 Chalk phone Amplifier
14 Lithia ore process
15 25 points per Karat
16 Automatic blank powder Loader
17 KOH free of Chlorine
18 Measuring Volume of sound
19 Charts for singers scale
20 Varnish Cabinets Cheaply
21 Substitute for Celluloid Cylds record
22 Varnishing machine for blanks
23 Removing Mangan from Iron
24 Cheaper Edisphone record
25 Best Chamber & opening for Records
26 Auto furnace reduce 7/8 by H
27 Regeneration old SBattery process
28 Re Organize Disc dept
29 " Diamond
30 " S Battery

Aug 9 1920

& days	rejects %		Rust in baths
Cullen	20		385
Kennedy	6.2	24	322
Brennard	9.4		318
Watson	4.3		116
Baker	13.3	22A	127
Smith	11.5		182
Langy	6.3		252
Hart	12.6	22B	174
Dunn	7.8		218

Charles Emerson left on account of Hart & Clarke Mfg Co desolation in plating Worked in plating 4 yrs 1/- Want job - Lives in Orange

500 cc glycerine + 150 grams #60 double wash flour Evening With Ice Cream mixer we have use 400 cc glycerine + 120 grs SFXXX Evening to a dose

No amount of soaking in the strongest Solutions acid or Water of Nickel appears to hurt the record surface a piece No 007 soaked for weeks + even sent 1/8 radius shows no chipping off - Copper only a few minutes all scales Silver requires 10 to 20 min to show any stripping 2 hours is not enough —

#24 Room Copper Bath.
Spec G 1.183 - ~~1.22~~ 1.183 At 22 1.181
$CuSO_4 + 5H_2O$ 24 -

8/11/20

#24 Copper baths
Spec G 1.183
$CuSO_4 5H_2O$ 21.76
free H_2SO_4 2.27

22A

Spec G 1.181
$CuSO_4 5H_2O$ - 20.99
free H_2SO_4 2.33

22B

Spec G - 1.182
$CuSO_4 5aq$ - 22.19
free H_2SO_4 2.74

Casey Anode Kept away
Can put in new anode or
partition + Thin Even with a
Rod + in 10 Minutes Copper
Mud all settled down +
Surface OK. Aug 11/20

First Taught Polished
Ernest Ryan OK man

Belding Ow amp
Meters on Machine.
Number of discs/in
+ Wall, deep meter
dont Check.

Try disc coated Rubber
dope which dope has
Resins in or other things
to prevent water going
thru rubber. Try
Sandrac, Mandle Copal
Rosin, Koppers

Try cleaning Ni disc with
glacial + more dilute
acetic -
Get good test for acetic
in Ni Sol - also all anode

Our $CuSO_4$ solution must be full of iron - test for it & if large use Cu_2S or something to remove it.

Abelrad says use Cu_2S & filter -

Hawkins (Miss) get her out - playing her to influence Charlie -

1/10th of 1% glacial in water turns Litmus dark red not bright Red, This is not enough for baths &c

Have daily Log kept of filter press pressure & how flow all along - Get Gallon Rubber tornado & Cut in the 2nd filter

Get Brass filler Cap Holder in Log

Plant dead oil flowing New Mr. Fowler & break in Man but 1st get supply of holder drying box

Get down brushes of right Kind -

Moore Lapping lathe Chuck so not hurt Rubber Varnish

Moore get new 3 foldin table + bench man Never 1st man over to Jan 22 or Jayson and Paullin -

Welding Warner Wants 12 amp 8 or 9 Volts.

Ventilator in room where we rubber Coat + have drying Boxes

Casa Cove Anode Expl.

8 hour shift Varnish with 80 cc Rubber 400 Desco 25 Litres

Benzol to be Evap approx 1 gal hour, find out how many ft air necessary to render this amount 1/5 of what is Explosive

Use Electrician, Patent Rausch - practical.

Varnish Benzol - Room 1000 ft Content Renew air 6 times hour Mess Safe

Benny says Major Anderson who works for Jones would be a good man as supt of Plating plant.

Want a non viscous at ord temp strong Cementing substance to take place of Beeswax & Resin for putting Matrix on face plate with as low Melting point as Beeswax & Resin now used

See our plating plant distilling apparatus & arrange for Bench Vessels of liquid also a receptacle to hold Distilled water & conveniently feed it gradually. Keep Volume of Liquid the same at all times.

Try & make Kodak Co be turned can be hastened by Kopper Resin dry - do it brittle & stick along to face plate 175 MP - Vaseline softening point -

to get Fahr' from Centigrade
Multiply Centg by 1.8 +
add 32°

Better try Lobme Vapor
on the Ag plated slips
+ wax — when yellow,
test it's ok go a one thick

Tell Moore that
in shrapnel room
somewhere block
thick oil is thrown
on walkings —

Flat laps maybe due to
full pressure on a cold
blank, No oil being present
in — find an OK discard
OK as to no flattening +
press cold in preference where
they print 2 —

Try if echoes come
if phone is not
level —

Try the powerful
objective from Micro
in Chemical room
on flat log coke
mould — Results
Record from it

If Veneer N is too thin & is loose on backing it may flatten

See Kalsomine about danger of putting in Maple & removing clothes in rinsing Amy at Constant Village too high Arrange it so as to make Change at one time by holding Maple till enough for whole room

Get supply 2 1/2 Thermometers Easily read scale for plating plant - protected by non acid holder & Loop at end to fasten cord & Kept in position Read at all times

Test for Acidity in N1 Electrolyte

Blow air thru on to Litmus or other indicator absorb water globules by Cotton or Strong N 2504

See if I get can 10 lbs of the Emery finer than I now use & if it works just as good on Ns also try Coleses If this will do it will stop Scratches — if none send for some
2 Cans

find out if Clancy polishes Masters, 1st finders 2nd Masters & 10 lbs females & what with too many longitudinal Scratches

Clifford Radford
16 61st Place
Chicago Ill.

Chemnut Lever hung Ladder a Ladder. Back Saturdays — OK 3 years.

2 Chuck There is unusual wear on the platens on press

See about new smith presses — Especially platens — platens parallel within .002

Ns rough turn marks — Sunpoint grinding scarfed.

Send for 100 lbs SF 12 X get price 1st with 6 machines 2 of which have 3 shafts required 2.6 lbs daily — about is for a month with surplus —

Fan in Master room to Buck in do when place

Elvira Severson
Contralto fine singer

Henderson
Meats Dept.

Last 6 weeks average
discs put on scales
daily -
10 Masters
22 Female Masters
68 Male Trotter
276 - Hooking Feeder
1376 Roost Cock night

See if we can't click
Label on Master with very
low mp solder when button
is put on

We have a Chase
yet I see in Eve window
open - & very dirty now

Annual at Elvas
Take over Block
for rally & shut down
moonlight

Switches out at Dynamo
End of 22A.
Leads to Switches from
Bus bar, one cable with
one row only goes in
Warm -
3 Dynamos going

Tomany Many 1st September
2nd Mr Gio on Storeroom 3rd
floor talking about enlarging
it.

Shopping Collar (new) Chest
Oz wash.

Fagan - find out from
Dynamo to nearest
Nickel bath drop from
furthest Ni bath
Drop on Cu probably
worried Crane accident
increase Cu

---

gross reed from Jabbs	69.53
after 15% returns	59.10
" Taxes	56.09
" Selling Ex	42.18
" Edward Labels	41.52
" Talent, Masters royalty Pkg	33.11

Cost 54.93-
Loss 21.82 per record
See 3 leafs ahead

Send Madeleine a check
54.78 to pay for tires
to Kellers - Meadcraft would
get check & pay
Re. of Paulin & Fred Milner

Monahan give list of
foremen, Engr Elec OK
& what OK idle foremen

Fit up supply tank for
Mike Cooke for distillation

Get supply Rouge
5 lbs beet Carrots
Van Wicklen

NOTE

Using wax that
is attacked by Reg
24 grams oleic acid
dry polishing with
12 6 3 1½
grams dissolved per Liter
also 2 4 6 8
12 hours soak of
bare wax —
Same schedule of
density as we use
in Reg Waxes —

Have all polishers ~~use~~
be warned about finger
Marks. Must used gloves
on account of washing
but all others must use
gloves —

Get pay roll for disc
from Meadcroft or Allen
& arrange putting on
Dept —

Moore to design a
a buffing machine
with brush-fine hair
or cloth - to keep
Wax wheels bright
to stop sticking of
Rivets —

Have we the Grinding Machine working

Aluminum Palmitate is an Elastic Amorphous Mass made of The film of Aluminum Soap left on Evapn from a Solvent is impervious to Water It is this which gives us good wax Mixings hence we should find out how to get more Palmitic in our Oleic

Palmitic Acid can be made from Myrtle Wax which Contains Palmitic with only a little Lauric

Palmitic is made in large quantity by reacting on oleic by KOH at high temp

also made commercially from Palm oil -

Na Stearate may be separated from sodium Palmitate by fractional Crystallization from hot alcohol

See if we have Extra Supply of Stoneware Y Cocks Etc.

Follow up incrustation in platters + pipes in press room it is an awful state

dime.

3/16 hole

½"

get samples + send to Water Softening people Wallaceburn Etc

find if Galvd tank ok
for distilled water
if OK tell Buchanan
+ Salvage

Why Cant Switches for Hoffman
presses Electric be put
together + the Z switches
on Operators floor

Cost records July 1920

Labor Material & Supplies etc	54.93
Add returns 15%	65 36
Add Tax	68 37
Add Cost of Selling	82.28
Add Talent Modern Rotatile Pkg	90.28.6
Received	69 53

21.82 Centro Merchant

Dec fumes Upstairs are
using SF 12 X sprat
start them

Letter. Asphalt from Wm Gilmonte in Bengal & SO_2 from Gilmonte in Bengal Equal parts -
Test if sulphur absorption
Try other asphalts -

Send down to Blake for some Oleaginic acid to Expert cable + get formula — Want to get Palmitic out
Make Palmitate Alumina alone Etc

Use old cells (wrecks) filled with Electrolyte for packing Expanders
O'Dair.

O'Dair take no orders from anybody but me

Get an idea of various kinds + equip Several baths -

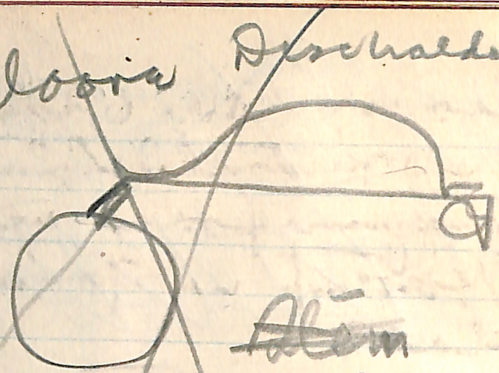
Get a letter book + test at high speed -

Jamal man investigated Iwe arrange manner to stop lupinoski -

Get layout Stripping Room away

2 samples of Palmitate Aluminum ok order 20 lbs acc if no dust in it

Try different proportion of Asphalt in Pecharo Rubber dope — it might make a good backing - test



Must not use
Vulcalens —

~~Iron Oil~~ Make both belt hooks.

Medsbook of ~~sandman~~ getting up forms of book —

Neutral Copper Sulf
plate grafted Abrips

Rig up still bath
new neutral bath &
rigging for work
Wash up garage
floor —

~~Listen to Lorey recording~~

Be sure to try Chloroform
Rubber

With Cu Ammonium sulfate
probably free Ammonia
will dissolve Oxide
like acid do on
CuSO4 — both bare
Equivalent Reg bath
2½ % acid — new bath
1 or 2% Excess ammonia

Report Caldwell + Neil Sept 18/20
Each listening to 1170 record faces taken off press at one time, but O'Neil's in Music room which is quiet Caldwell next Ballys room not so quiet - taken off press Aug 31

Smith Board

Caldwell	Very Bad	19	Neil	50	
"	Bad	471	"	690	
"	Fair	614	"	399	
"	Good	64		31	

Surface

Caldwell	Very Bad	139	Neill	24	
"	Bad	268	"	425	
"	Fair	629	"	650	
"	Good	132	"	71	

Repeats

Caldwell	Very Loud	156	Neill	49	
"	Loud	173	"	354	
"	Light	285		319	
"	None	554		448	

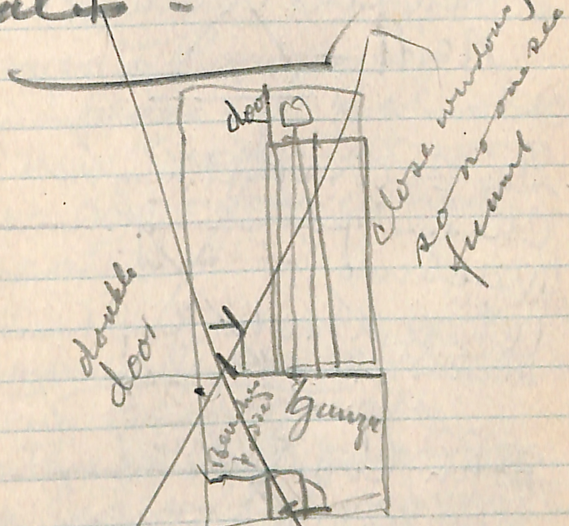
Bad Prints

Caldwell	31		Neill	62	
"	Prints Buckled	129	"	160	

Bad Repairs

Caldwell 22

All our Crates are based on Vehicles & are flimsy by Mfrs Cramping Space Wherever we are not Cramped for Space we should adopt more Husky Galley Hadley Crate -



Ryan
Fox Studio
Thy own

Go down to Shake + look at Wax Dept + also Salvage plant + find out what was trouble with Bob Lee outside of Drink —

Jones get me 3 more men like Caldwell + Neill —

See Gall + start him on Cheaper polishing diamond Machine
Where does he keep himself
He could go in lab dressing room —

John Constable — fix new Canning box

McMullen Rig up Country Soy bath + plate wax masks + Carry them to print on Daily blank

Develope belt hook + idler

See if polishers upstairs need SF 12 if not tell them to —

Get a man to run Garage Lab —

Go over to Ramseys + find place for polisher in new treatment room or in old room when vacated —

Benny to substitute Iron Kasdeons all baths get not plating the Center when found using new standardized baths

Buchanan how about that Barelling Machine

Go over to Battery check out
Regenerating Room 150 x 60

also place for Vacuum
Machine -

Get Report from Hunt
on last battery tested to
Mechanic 3/16 Track.

See if Benny Cut out all
back tops for stem
rotator,
Ask how fast does he make
Maple Seperators.

See how much aclenium we
have + how much used
then buy 6 months
supply 3 months Minimum

See Moore about filler pieces
when all plates are changed

Where is the Calmetals Al
Samples?

get pay roll Salvage
& Sales

Arrange for Pilot bath Ameter
so Can Regulate Volts
to get requires amperes

Archer see if we get
4 amp - Raccoon
will help, & what
wires have been put

Based on July/20 costs
with Labor + Material Costs same

Then	Cost	Saving
500 000	54 13	to on account
600 "	53 46	overhead
650 "	52.94	
700 "	52 49	
750 "	52 12	
800 "	51 73	
850 "	51 49	
900 "	51 22	
950 "	51 11	
1 000 "	50.77	

Reed from Marbert Sept 13/20

Arrange with Anderson + Kasakova about 1 Man reading V + Amp nights + Regulating He attends alt 24 224 228 Ni —

See about Cutting out the old Amperemeter wires — if no man here will see man from Keystone Concern

See Wolf ask Jacobus + Taylor about him

Get Analysis of Ni in Carb Ni W 2 Inch at 6 Lake Ave —

Consider if it would not be better to have on night + day, Man to read V + amp Every 10th bath + Reg Volts + attend Dynamos,

Get Coils in Cu + teach men how to regulate Temp.

Arrange so man put in parts time on slip to know when to switch over to full Current, otherwise it's too thin —

Consider a ~~night~~ Inspector like Archer,

See what our old Chief Draftsman does who left us during the war – He could be used on working out Detroit Lake Furnaces for annealing at Orange plant.
& also alterations on Blake Crane – + Welches for Experimental Contacts on old Crane

Ask Weller if he determined acidity of salt from Mr Dale Edgerton & if not Edgerton get several samples different Cranes & have it determined – if none Edgerton try Acetic.
2½ grms per Liter in one Crock or 2 + rate plating

July Pay roll got from office
There was on Plating Plant

Bath Cleaners	8	
Platers	9	
Platers helpers	17	
Treatment	9	
Carrier Treat room	3	
Casting Anodes	4	
Carriers	3	
Pit pumps	1	
Lathe hands	11	
Clean back of Molds	3	
Genl Foreman	1	
Preliminary Bath	1	
Overseer Detail	1	
Bath Tenders	2	
Messenger	1	
Labels	1	
Repair men	5	
Wax Masters	1	
Overseer Solutions	1	
Master Repairer	1	82
Testers	3	
Control Room	4	
Mould inspectors		
Treatment	39	
Despatcher	1	
		18

Stripping Time Cycle

40 per hour - Lug back cleaner takes mould from rack cleans & returns to rack ready for lathe operator 90 seconds

Lathe Oper takes 15 Moulds from his rack outside to his own rack average for 1 mould 6 seconds

35 per Hour — Lathe Opr takes mould from his rack places in Lathe, tends & returns to rack 105 sec

35 per Hour — Man taking off backs of beaded mould to his bench gauges & numbers mould, takes off back bead ready for stripper 105 sec

40 Hour — Stripper strips mould finds Correct Bath ticket replaces it with Mould, places moulds in Carrying box, makes out receipt - 90 sec

Commander

Fred all - Extra charge of send for McMillan Electro Cleaner -

Moore - When will new Jaws in Beading Lathe Be ready want to try new Rubber backing -

Get the Cycle Time from Fred all for Varnishing with Reg Rubber dope Must Varnish 400 daily see if 1 Machine will do it if not must make another -

Hurry up Double Cup HH 504 Still 6 baths -

Dougherty. tests for Stearic + also Palmitic Saponification Value Etc + tests generally for Wax

Get man Experiment on palmlate Alumina with Electric Elc to get an improved wax

---

Go up Clancy room with Buchanan + Lay out place for inspection dept Wall + Operation, + repair Wkg Moulds —

See where Golf Hangs out + what is done about reaming Machine also after gets Comfortable reply get Galls Criticism

See if Benny Cant put another man on putting Coils in if we have them —

See Clancy if we cant find room for 2 more sets polishing machines

Moore, how he is going to arrange his bullpin Soldering Machine + Where it is to be put

Tell Dougherty that there is 6 rolled lead lined Evap Pans longer than he has that he can have + probably can find lead pipe for them

Dougherty — if he uses acid Salts in Wood press without he washes out with water + keeps full water acid Concentrates by Evap + Eat up Cloths + Wood — also he can use fuller Cloths over + over as we are now doing —

Get up report of numbered Moulds removed each day as worn out or taken off for other reasons —
Examine if fractured or worn

plan to show number records printed from each Mould —

Bed taped Blocks for 6 with brass —

Warner why keep body on Cylinder.

Condition Mould Room & Arrange only for Masters now Take a run for Condition —

Find a place for grafting Masters, Very high up — Top of 24 — poly — Lower or on top

Try Rosin Soap on Blanks + put thin Varnish deeper Enough for fine blanks

Get Kaskaroz Show me the Mi Clippings he spoke about.

For fastening working Moulds on face plate —
Try Wax thin with water & glycerine — ditto water & NaOH, ditto Rosin Soap with a small end glycerine — Shellac in NaOH. — when get ok test for attack Copper at 350 Etc

Wedocraft has on file book list of work for photo works given me Sept 14/20 by Dempsey over all chief draftsman

Formula for sticking protective paper on moulds

90 grms Dextrin
6 " Caustic Soda
100 cc Water

dissolve Na in hot water add & stir Dextrin 20 grms at time till all in let stay on hot plate 3/4 hour stir thin & works OK with brush sticks light Examples 20 minutes

to Equal the Beeswax Rosin stuff for sticking mould on face plate must stand 30 lbs per inch of surface twist & test shaved dont break then 72° Fahr

Make up daily 1/2 gal of OK in morning—

Also make 3 grms NaOH, 100 cc Water 100 grms Dextrin, also 9 NaOH. same water, ditto 12 g NaOH to find the Range— filter it to get Lumps out & find best temp for brushing it on—

For fastening on Dry stiff Molasses in fact use candy then heat— also paper soaked Soap & then heat
Try Casein Alkalin—

Phenolrosin + alkali,
See if Reg Beeswax + Rosin will
use now dont come off with
5% alkali hot water.
Acetone + Rosin
Alcohol + Rosin
Carbolic + Rosin
glycerine +

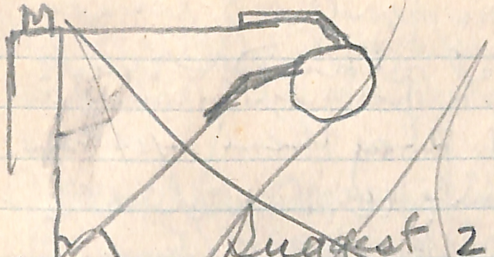
wash in alkali

Expmt.

Left Piano -
Livitsky - Beet,

Look up Conductivity
of Proteins.

Think 3 grms NaOH 150 Dextrin
+ 150 cc grms of water
Cooked 1 hour beat
The 6 NaOH works OK
~~of 1% ammonia on powder~~
~~Keep at it~~ Must make further
Experiments —



Suggest 2 Sets
Brushes on disc Elim

See Buchanan about
designing a Path layout

Selma Kwiz is coming
over on Tuesday

Josef Schwartz
Baritone also
Russian jew also

Have many hunt all drums
steel bbls Carboys -
note steel Elec Have him
find out how many fast a month
is made of cast iron scrap also

also Value as garage
to Coat automobiles

get Music for the 3 Linen
Benoist played & have
Benzler play them also
Wedding Winds Waltz -
for Reg Sup

Listen to Hayes trials

See Fred Ott rubbers discs
with Gleason in

Fred Ott, also try 10 &
20% Rosin in Rubber
& Coat discs -

Get formula of flake
Cu dissolving from
Bat & Eat of Clancy
Copper stick to mould
Label - use a putty dam
try key

Moore = How near are you
with the New Lathe Holder.

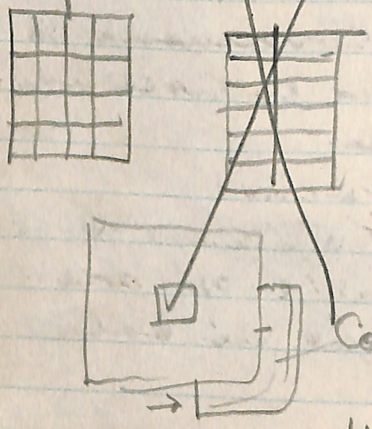
Order 3 amp meters
Round Reading to 25
or 30 amp 1 for each
room - go over to
Westons personally fix
holder
Arrange pilot Baths

Arrange at a night
Night Supt read amps &
Volts all Bldgs & keep
OK (pilot baths) & record
Racecove does whole
bath readings days

Make 2 more long plate
Grafite Electro Cledners
So one shift does
all -

Mac to start + dup the Copper Master Expmts with Nickel Moulds + see if they dont do better in stripping —

Have Weil + Caldwell try baths —
Also Expmt on making noise near booth window closed open at top + also a window



See if Benn fixing Studio partition —

Weller Uses 25% more NH_4SO_3 than the Double Salt,

Think Anderson days + Vinson nights could attend to new pulling in, only 6 & 2 shifts

Print on Condensato ltm 2 Kathleens to ascertain loudness,

Moore Archy
See if Ramsey Discs in Cleans + 8/4 are set Central in bath
Baths —

Possibly reason 17 stuck to label dont wash out glycerine Well Enough on females at Labell Warn them –

Moore what you going to do about getting the old type of Centre Chrome Steel Center piece Screw in Mould gall changed plates

When get new box for Carrying find how many we will need + see lowest price can make put in Store room + use as old boxes wear out.

Letter Dry Cubay + Sulfate Mg – Na K Li Zn Borax + alkaline salts

Sept 22 Hagen get "You will love me when I'm Old" + Dreaming of Home + Mother

Letter about Shipping Silver + Mel Lite Alcohol

Try Viscose to stick paper on

Try following Sulphate Copper Solutions –
Conc Cubay 25% KCl – NaCl
Acetate Na ditto K.
Citrate K – Na, MgSO4
K_2SO_4 Na_2SO_4 $ZnSO_4$
NH_4SO_4 Sulphite –
Cupric Ammonium Chloride
Very sol –
Bromate + Bromide Copper Very Sol

$CuCl_2$ 2aq v sol.

Lactate Copper 14 pt cold
Salicylate " V Sol
Sulphate Sol 31 cold 203 Hot
m Sulfate Copper Acetate Mg
" Bromide Mg
" $MgCl_2$ 167 cold
" MgSO4 7/7 "
" K acetate 188 "
" K. Borax V Sol
" K Sulfate 8 Cold
" K Sulfite 2aq. 100 cold
" K Carbonate 133 "
" Na Acetate 26 "
" Lactate Na V Sol
" Na Sulfate 44 Cold

Try Sulfate Cu alone
Acetate "
Chloride "
Bromide "
Chlorate "
Citrate "
~~Carbonate~~ Lactate "

Silver Salts
Fluoride Silver 182 in Cold
Fluosilicate Silver V Sol.

Copper Continued
Double Chlorides
Cyanide Copper + K do Na
Double Salts

See if can Coat our finely divided graphite by Ag + formaldehyde. + still keep it fine - + If Can dry + use Warmer try a little

Go down + see Bates Machine Made, see if anything Can be made Electrically

Or Silver.

Hots Quick method

Graffite, Cover Copper + get .010 Thick 25@30 amp rate, Cold solution Strip, back up, asphalt that don't shrink or Plaster paris = perhaps covered with Carbon Oil on back, or fusible metal Ele, 8/4 Ni at 12 amp for 6 hours, strip + back up same way. Then 8/4 Ni 12 amp 6 hours + back up 30 hours at 30 to 35 amp - 2 anodes 115° Tabs + Faster rotation Turn + print, use 6 Masters, 3 times. 18 females 3 or More Wkg. Moved from Each 55 + print 1000 from Each -

Big surface anodes Long rods

Expmt on Asphalt Ele backing + high amperage

See if we have a testing Machine Constables room test punched straps

Find out where + how they pack Edisphones for Stevens - + arrange to Change A,

Go down & Take look at Jour Chem Wks + GVM + McChesney - + wax Dept to get Samples Hot wax -

Look a strip anneal furnace at 2 Battery.

Open book battery tube tests also temperature tests, also tests Archer once made for number of Pump - Iron tests

Work out system of books for the sheets & records daily

Daily report sheet on Microscopic inspection Masses of wax ok + no signs of attack.

Moment Palmitate Aluminum Comes, get Req formula + Substitute Palmitate Al for Equivalent Aluminum Metal + Loosen the Oleate to that Extent + try in $CuSO_4$ Sol + quickly get some our best wax to compare

Try dis in Hot H_2SO_4 the Strippings + see best way to dissolve so can ship to Q.M.,

Follow up Panther find out longest run of any Moulds now on

See Tabulation of tests of the 4 records with the proletariat —

Get the last records after wash get them + start Cakewalk + Neil on them — regular only test 1/2 at 1st +

get some discard blanks discarded for various things + also Varnished blanks + see if can be repaired

See if so see left for Mould number can be numbered + dismantled

Grant to follow up Trucks
Extrapolation Rats Kind mean
close time, too many mean
understanding - Co-dependence
between Cols after Drum painting

Enter in #4 book that
When we started
Removing Solution
for purification
our troubles from
burning + Brittle
discs started its
wrong system is
Rubbing in water
+ Cursory Cryst —

Just made 100 cc Alcohol
100 gms Rosin
10 cc Cotton seed oil
for sticking our paper to
Mylar - pretty good but not
sticky enough 15 cc oil better

12 Baths
2 Bat across at back a
blower 54" high - 350 Rev Min
3500 Cubic ft min at that
speed - Fan wheel 33"
Dia OK

Get Track of Eng Exposures

Get some Dupaco female
& use light Reproducer
+ see 100 times if any
signs wear so we can
remove our females for
Repairing —
Perhaps can use glycerine on it
+ Eng Reader

Keep up Expts on cleaning
Wks Mouldy Chemically
to get rid of painting Machine
- See List in pocket.

Red of Chloride of Silver can be got into an impalpable powder & so can Coat wax Master at it will reduce plate simultaneously

Write Bernard What I regarded the 2 Records ask if he would Come to Orange & play them again

Make Buller dark samples of Wax, get req formula & leave out Al. Equivalent Stearic & make various ammts Palmitate Alum & Try some Palmitate Al alone

Pick out dog news from Records & take surface for Maxwell to hear

Go thro in McChesney's plant & note byp products

Also my plant, Note any Crocks in Sulfuge or Lead lined tanks.

In Expt'g to dissolve off Condensite Try Blanks to get action on a spot.

Try Oleum, Hot ZnCl. acids, Na Amalgam — Oxalic, fused NaOH, KOH, Kcy. Metallic Sodium, Hypochlorite fuse then NaOH Conc Hot. Nitrate Hg. Nitrate Ag Boiling Linseed or Castor oil followed by KOH & NaOH Hot Conc 66° Sulphuric, Molten Metaphosphoric.

Try New Ni Mould plates with Copper & point ace of Condensite stix to it.

Try Rouge on a Nickel

Find out why Hatley's Varnished blanks so much finer superior to our reg blanks

Find out why they don't fix Varnished record racks so Vas don't pull off at supports

Each day record Worlds Numbers having serious dents found in press room then in a week we can Compare & find if in Wkg Females -

Carpet & fix up toilets in staff's place for clothes & key for girl's office -

For shaking on face plate use Rosin & Oleic acid Then Come off OK with soda (probably just as good

Put a cell with Rubber Cork & also find out Cost also device if pressure accumulates it will relieve itself - perhaps the rubber over filler hole with pinhole over Peachy process -

Try Experiment dip in peachy process rubber -

ditto Crates,

See if pulling process will save steel ribbon by removing buckles

---

Put thin oil over Fox Trot Etc on A process -
Master, Female & Wkg M -

Sept 25/20

100 cc Alcohol
100 grms Rosin
20 cc Cotton seed oil -

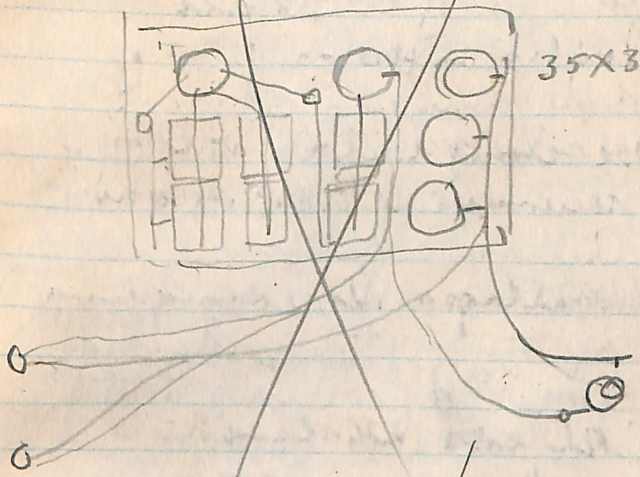
15 Hours OK sticky
& Satisfactory -

Paraldehyde works
OK on hot plate
Reflex like - Very
Red dedut time it
probably 24 hours
guessed bit proportion

Phillips Study enzyme
& fit tune to enzyme
Collect Scales &
pick soup for best
part of Stales -

Load up Neutral bath
with Durvyden Dope &
Have Mc W get another
dose ready

For sticking on Dry
Rosin & Elaine acid -
Ditto palmitate Alumina



Or 2 1000 gal Tanks
with wood stirrer to dissolve
Crystals brot from SL I always ready
Should be laid out for Whale &
only put in 2 Tanks

Tell Rascoe to use only 1/4 Ni discs - pure Copper until we get arrangement fixed up

Try dissolving discs + see rate + what goes in solution

Try Rosin + Oleic,

See about $CuCO_3$ at 5 ℓ for neutralizing acid in and Cu soap solution -

also abrasive or Nesoy from the Ing $Ni(OH)_2$ dump at 5 in Mother Liquor -

Terry for continuous reduction Iron + Ferrous Li from Sp. Sweet -

Try the Blenway + Rosin in the Soda see if comes off clean.

Small plant Expand Crystalizer Soda at 24 F

go down + paint Cover of pots with Silicate Soda Ditto asbestos on lime Cream slaked,

Can air going to oil be cooled from pot heat

How about Powdered Coil wound Ag -

O'Dare –

Get Regeneration set ready for big – Read Year about process + things wanted

Arrange with Chas & take over all Exporters,

Get Steel Cast iron &c Hart paint Wells glass + many other things bring up 14th,

In any Event put the readers in on new Col of Cubes

Get the Radio call from Japan to fix Get G Calls + fix with wider jar to all bigger pen inductor

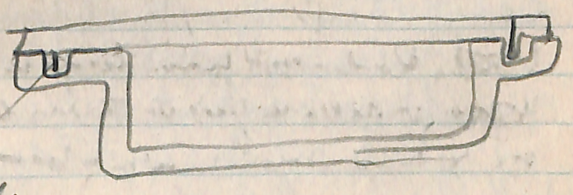
Edgerton Make an Equil Contact Have about 6 inches

Take up with Fuller Eng Scheffler about substituting powdered Coal and furnace for oil – Meadocraft wrote Scheffler

go down see our plant Silver Lake Take Douglass + sample pile of Nickel,

Dougherty try dissolving Requested Grey black stuff

Ask Yez what more does he want to start the 30 lb daily plant,



Fusible Metal.
Wash to prevent sticking to ring

Park
The front. to Collect all scrap metal around McChesney + go M place

Charles - What he is going to do about Salvage
Wyat,

Tell Hart. Enamel
Ed Douglass Lot Extra Litharge + some NaOH, fuse + grind up paint using little Silicate Soda to paint with if Crack use china clay or Ox Neg
flux - Fluor Spar, Borax Red Lead

Rush plans for box ths

See if they are holding that blanket at SB at for me if so have it delivered in yard near 24 bldg to be sure of it -

In New tables see that steel pins are put in idlers - see Mort about this -

See Stevens about the foreign pkg - get history of troubles. + go ahead.

Benny - Next move is to hurry up the new tables for Master plating + fixing up Conditioner + filter for Master baths Cooling + bag filter 54 3" bags - + Clean whole place up

Benny - A new conditioner is to be put in old Celluloid + whole place put in Condition for grafiting Design Conditions -

Ask Meadcraft if he wrote Bureau of Engraving about

over

Cloths dipped in glycerine or soaked Castor Oil & glycerine - This on the principle of the Nose Can make these in frames & set in box & squeeze up by screw -
Can take out & examine & it wont give any fibre.

Smith try Silicate KOH in small cell - give 65 amp hours place 45 when proportions are right - see if can make double cell in one -

Get blue print for drawing of Towers in Boat building also find how many roughing Machines OK & how many in progress.

Edgerton Sulphur wont work well on Ni

Doughlenny on Lithia -

Keep up Expts cleaning Ni Moulds of Condensite. also of better Varnish blanks

Ask Dalley if he continues using Cast iron top plate in making blanks if not to mark it & will have it put in use in req plant

Where are the 2 tracked blanks Milky Made on new wax Mac M to find & put them

Draw out new drivers to Scale as Table is now & Select 3 or 4 to put up for actual test -

Speak to Moore about a 5 phone polishing table indexes - Slogan Help to keep up Loggers -

Mac to have proper party Keep tabs on Models Numbers for a week for scraps of dent discards Think some may be in Working Females - as repairers Can wear them -

Moore fix up a phono with light weight Speaker for working Females to test - Turnover 100 times on disc

Go over AB air anneal strip furnaces -

Follow Dexter up on the Neutrol Solution -

Ask Moore if he made the little stacking Machine to stick on moulds -

At Orange get M ships short tube test headers bad & been month fixing it up - say fixing fast as they can

O'Dare Weight some Excelsior pads duf shaped -

Meadowcroft about booking the Motors, Sparies ~~etc~~ in one place - & then each concern keep up reports to Central Off -

Sept 27 206 rotation (new) in
28th 233 " "
Oct 11th 473 " "

Latest results satisfactory after 36 hours

100 cc Alcohol
100 grms Rosin
25 cc Sesame or Castor oil
30 would make it stickier
It comes all off in Caustic Soda half in 30 min probably less -

See Hauck - arranging direct system also get copy of scheme & quote Maxwell & arrange trial -

Arrange cut door thru from old to new treatment

Fred off for Varnishing Work in new treat room -

Arrange polishing Machine in new treatment - Abandon Emery & Use Rouge - only to be used for treatment work - Abandon each in running water - When arranged go on 1 shift.

When go on 1 shift go on 2 shifts putting in

Buchanan better make Double operate & removeably connected then can change. Less if Can go in Elevator.

Arrange test for mould injuries of Moulds in press

See Hayes about further Supplements if necessary, + put Phillips on to study them -

Coyle neutral Inspection
Blue Numbered Moors
accepted made wolfs plan

7 to 3 shift Solution
Bad. Records Stuck
to Moulds. pull outs
& Couldnt do any
with d pull bars
on Mould. Changed
Solution then OK

Went to 51 61 Etc
new 93 97
98 -

Tell Clancy that I instructed Control room inspectors to watch + note on Card errors of Dents + that his inspectors should look for them + if found hold up

See Wolf + Paullin about the daily report of Discards + Hows Altinggiven Open book + Presses till Cards until entered on daily report,

Speak to Paullin about Lack of Organization + taking so many men on 2 tables too much now + Schedule rotten Taking on too many men

Foreman to mark all Mechanical returns + Make Req repeat Causes

Speak Paullin about Framing Table

Moore get adjusting to guard openings or something better Stem holders -

Paullin Buchanan Mccabe must fix the Sewer at once

See Ramsey + Jacobus + have all female marked where the dots screw + repolished see day inspection of Wkg Females + Jacobus have chg of it to run it down + forged Causes ascertained

See Mac + Witter about doping the last cell for wax - if dope no try more + another wax Master -

See if Mac was got any of the backed up new scheme wire Moulds or tracked Plank

About Dempsey fixing up Mullyplugs.

Lott about going ahead with glass Expts

Turn Heat over to McChesney

Look at G Cells + study best way out -

Painting Steel & Cast Iron
Stop Oxidation
Asbestos + Silicate Soda NG

Litharge + Silicate soda Good

Sodium Silicate fair

Leadglass Litharge, NaOH.
+ Sodium Silicate
The glass PbO + NaOH mixed &
fused Reprocessed + mixed
with Water glass -
If fusing plant could
be lowered it would
be good. Forming an
Enamel,

---

get Model new
Canopy Box

Attend to Jar Sol for
Hoffm. fix Fixtures for el.

Cost per separator per 1000
Labor 36 Cents
Material $3.13 G757
G1457.
Labor 53 cents.
$5.61.

For the size Cell Jaquar
sent me 24 Extra
Separators necessary
Cost 9 cents to make
Cell OK - + ultimately
get Hood back on returns
31 Cents for A 8 - scant

See Combination Rubber Co man
see if he can make hard Rubber
tubing 1/32 thick we can
Coat with Condensite Vermnish
+ print, it will Contract
much less contraction controlled
by fillers —

Also hot glue painted on Mandrel
greased. Makes tubes +
print right on ~~Cellulo~~ glue
with + without formaldehyde
possibly inside of Mandrel -

Try Glue + film Celluloid +
print,

New Rubber process filled chalk
+ fibre, or no fibre + full amounts
of soft Cubrain + make tubes —
Peachy Process.

Pack + provide Circulation
50 discard Ni faces records in
box Crockery ware, or wood
water + set in warm place

fill with acid + Conc CuSO4
+ put date on Dry Wood
Pail or tub surround with lead
pipe + Lag it + pass heated steam
through 145 deg for hrs + rate
time + keep supplied CuSO4
Keep Cover on — possibly
(probably have to) do them —
Get a man for Expmtg on
Minerals + this —

Get from Fagan 3 returned
for repair, worst G Cells

Find a device to hold 3/16 tubes
in position for pressing —

Experiment on precipitating
$Cu(OH)_2$ containing 25%
of other thing so we have
75 $Cu(OH)_2$ + 25 XOH_2 or
other thing to see if get
Catalytic effect to prevent
dehydration of $Cu(OH)_2$
Later try it —

Mac - get 4 Good Records put in our Ni baths at 10 amp + go for 10 hours or more to make 100 amp hours, + back up with Copper reg way for working Would then arrange these 4 + run on press + Watched + Every 100th print preserved if they go bad Keep right on until I say stop

I believe worn flat is due to thin Nickel, the Copper flowing + giving flats These records being Current stuff can go to stock not costing us anything

Should time be too long for removing the from Press Can run them a day with Edge wheel or spinning tool + Cut them giving access to Ni + more bearable action

Find out if Duke Can punch anything from Disco -

O'Dair Nail 2 pieces ready to head + test drawing power + Concept breaking down wire strap

Of 168 Records test prints given by Wolf dept to Neil + 145 to Caldwalls after discards removed by Wolf The room of Co Neil quiet padded seats - 313 faces 38 Bad 87 fair 170 fair to good + good - 16 very good 90% parallel - 60% good

for Drying boxes of rubber back discs 8 boxes in Dryer at once - 12 boxes altogether needed - 6 make box with Buttons on or 18 with 4 button discs -
1 box in 2 shifts 3 coats does 54 discs -
400 disc to be done in 2 shifts All Coats on reversely Each time As it will probably be unnecessary to Varnish Each time Think Every 4th time it will probably only need 3 or 4 boxes + possibly 1 shift -

New Mould Dept 1 girl allowed 8 min to go over record 480 minutes Capacity 60 per girl, 350 test records Requires 5 girls,
1 girl with 5 Machines to make the once run over will do 350 -
It 50% is doubtful.
Then 50% will go to Caldwell + Neil to wit. 175 or 87 Each. as this is more than they can do It will requrie another man, or 58 to a man now + as we improve this Extra man can be removed -

With Operating Moulds on press. 92 presses.
Every 120th mould tested
2208 Moulds Operating

Will require 1100 Records to be tested every day
This at 60 per girl is
19 girls +
This with 8 persons for
new Moulds requires 27
Booths,

See How Buchanan get on with Model 6th -
+ did he get Blowers.

Change filters on 8/4 to Maple and 2" bags.

ditto if possible on NaSO4
send out from Ramsey
amount of NaOH he uses
tell Archer test alkalinity
of the solution - first
test if filter bags will
work in Lab before using

See if Extra 2 Cleaners
Fred Ott says we ordered
are finished

See Mudd about bid
on Carrying boxes +
see Commander how
many we want,

Ask Beany why he
Cleaned top Copper
bath when we was
remove them -

Note date 2nd Oct
we polished wkg females
showing minute dots
as spots to stop dents

See Mc puts in new
way in still bath Excess
dope in

Listen to Losey's example

Groupsee Sanborn to Cut Costs.

Eye inspection of records 600 records daily per girl. 480 minutes - principally bad blanks pull out Cracks etc - 15 girls 90,000 Records

3rd 1 final Umpires 1st & final -

Clancy - 350 Moulds Control inspectors moved up there Eye + Micro before turning. + passed for turning - 5 men - less when improved 6 Repair

Press adjs. mould repairers one shift days substitutes other Moulds -

Try 8 repairers at finest

Total	
Master + Journeymen	6
Inspect " "	3
Clancy	12
Operating Mould Repair	19 8
Record Eye + Umpire	18
Test prints	9
	75

4 Otl solder keep Tuy + Bi Constant + wary the lead test see if homogenous

Collect 12 Double wounds No Springs + 12 with Springs run a test.

Make for 1:10 V Lelande
½ deg test precipitation
Normal temp of equal
quantities of Sol
Sulphates & acid of blacken

Arrange with Faulkner
Central Hauck Young
Chief –

Look at trucks if adopted
to new Automobile also
number of trucks on hand

Give Dolly the new
OK tracked blank
to Operate with &
Listen

See Simpson if he can
well undertake auto
matic Loading job

Told McMullen put
Iron band same time
50 amp hr Ni & 100 amp
hr Ni r put on piece
get weight 100th percent
to nated plate & quality

Kasacova – dont run
NiCu anode down so
far want to get them
out of system –

Since Archer left Cubas
bad, who take his place
please send copy outs his
daily tests on Split tubes

Mod 2 Cotton Cord
for belt –
Dont forget the light
Wt reproducer Hayes
has one to loan

See Hauck put more presses on + no more people arrange with Hoffman, Pauthin
Keep putting on presses + arrange Schedule until all men are busy – 62 presses should give 52000 with force of 90 men on 2nd floor

Have Blanc mold Loafing at Glover house Construction find out Kind of Contract.

Finish up the Celluloid Written at Noon so able to print descriptions Constables

Precipitation of $CuSO_4$ in presence K_2SO_4 Turns black on asbestos over wire mesh or hot plate in 10 minutes dark blue to start with $ZnSO_4$ + $MgSO_4$ still bright blue at same time
10 min $CuSO_4$ + NaOH. Black –
$ZnSO_4$ 20 min – tendency to darken
$MgSO_4$ OK

Tried K_2SO_4 $ZnSO_4$ $MgSO_4$ $MnSO_4$ $FeSO_4$ $CuSO_4$ alone –

$ZnSO_4$ stood considerable heat before darkening But the good one was $MgSO_4$ This kept blue when very hot + for ½ hour,

Try all the other SO_4 salts,

Go to Studio listen to Joseph Records

Pound Moore for Light Reproducer

Make 5 different preparations of $MgSO_4$ + $CuSO_4$
Flatten 50 cc sat sol + $MgSO_4$ saturated + use different amounts + put on heater
The one standing highest heat, longest
Make big batch dry then pc calcite + make a pocket + test -

Also Soak a CuO plate in Mix + then in NaOH,

Caldwell - Neff did you get Wolf report -

Go silver L see my plant drills form bldgs for storage

All piping + fittings
All Extra Motors
All sheet Lead pipe
All Electrical Spare outside Current
All grinding App
All Screening
All Mixing - Presses
Pulleys - Bearings, Shafting
All bolts, nuts,

Wash + test McChesneys Bye products

Get Loss discards due to low steam + kill them to Steam Dept + Hoffmann

If we are to polish each mould in polishing -
2 machine of 4 each will be necessary - Each 240 day - 1 shift -
They will be fresh + used as fast as made -
10 sec cleaners only + possibly not at all -

Order the above

Select place for Boiler

Why wait so long for oil furnace,

Fix up Wolf + Caldwell Heil Sheets so can check.

Hurry the bevel gears drive for Gallo

Get Hoffman Reports in good shape.
Show loss Blank
Varnish
Print
Washing
+ Net to Block room
The total Number + also % -
+ Book them -

Send to Jones for morse men Clerk type + have on questionaire, for Watcher + Inspectors

Look at Gallo waxer again -

Go over with Warner to Tower. + place orders for benches when later designed

Have Warner design his shafting + Slonaker Crocks filters + system.

Find out Drawing for 3 windows + in winds + Ventilation + whole system.

Ask Beachand if he found and thy Power

Get Manager for ES 13 Chemical works SL

Speed up to 5 Rev all tables

Arrange for more Carpenters so our booths + tables go faster.

Possibly we need big steam datum nearby lagged at 24 to stop the bad variations in pressure

Get the 2 quarts water for the Chem man for incubation Experiments

Design a double brush + Double weight so Black record discs Can be polished 1/2 the time once over for New + twice over for black. Woor

Dry the $Cu(OH)_2$ $Mg(OH)_2$ + mix with graphite + put in iron pocket for Voltage test.

Terms of Payment

Schmidt spends Whole Week Expmtg at cost of $600. + makes 3 dep of 1 record inclusive. Any further records from 100 to 200 for each of them 3 Dep 1 record

Came Monday 11th

Get List of 50 lines marked good for Piano for Schmidt –

A Report of 1% of loud Cells in Reel Calling tested & these got has been stopped – why –

Rouge 9 tested & use to XXG from Conduct Hanson & Tyn Dunkle>

test sample again Did OK

Try light Reader with Old out Record – Still Challen –

Polishing Rouge Jos A McNulty My Gritty.

Red Rouge H F Griffith & Co Nogales full hard pieces 7 x 203

King & Malcom Kama & Special Opheil Hard pieces Quarry & Hannalt

RJ Waddell & Co Ky
No 4 fair - no grit
No 18 few pieces Quartz Poor
"R" OK no grit 46 Cents
16 - #4 35 Cents

Katzenbach & Bullock Co
full of grit.

Conduit Hanscom Pan Works
We now use
XXG is OK
best of all no grit

Regeneration discard Wtg Mould
1st 24 hour 14 gms Nasoy Sols
287 Cu Soy
2nd 24 " 44 Na Soy
269 Cu Soy
3rd 24 93 Na Soy
239 Cu Soy
4 24 141 Na Soy
203 Cu Soy
5 24 184 Na Soy
163 Cu Soy

Nearly alkali
Lime with Cu ions

Work Questionaire for
Business Manager

Questionair for Battery
Salesman Do Manager Sales

Questionaire for Electrical
Engi -
ditto for Electrician works
Wireman -

Foreman of Machine shop
Moore,

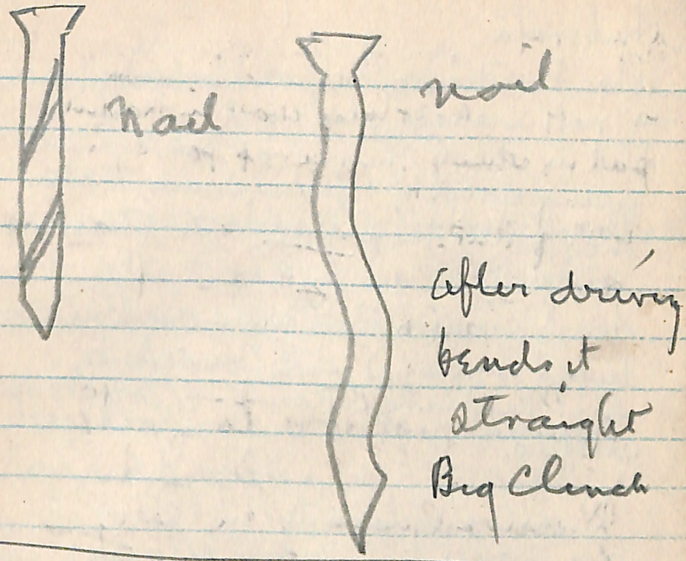
General Inspector
Think A1 Tool Maker OK

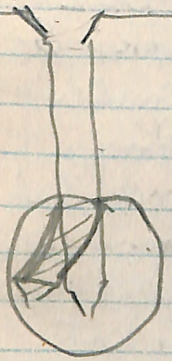
Arrange to use our well
water instead of City water
where OK - Nichols knows
about it - Where goes
to Sewer
Buchanan attending to it

Kaaacoss - Ni anode always
twisted around so worked
part always out of solution
Ask if Eaten & how long last
& supply of Nickel -

2 Inspectors to go to
Silver Lake Meet to
Jamestown etc Hear
answer a Question
about this - I goes to
Canada the other here
in Records etc Hear
in 3 months change

Perhaps Ca Sulfite
+ Ca Bi sulfide Lime
worked with Rubber
will react,
or Bi Sulfite Try





Try Alcohol & Seasame oil on
Moulds see if Blacken in
place Chl Tin - Wkg Mlds

Amberoids 1

Use Pontinac (box full in Galvanized cover roll in sheet also work in Kaolin + put in sheets then wrap pol. cylinder using solvent + press seam warm then print. Then Condensite Varnish

2

See if Comba Rubman can make tubes varnished with Condensite, soft kind like Okonite — Try Okonite people.

Dissolve Gilsonite in Benzol 2 parts, pass #8 1 pt SO2 other part See if it takes S + gets hard. if so Varnish with Condensite — Try Hard Wax, Cuba + Trinidad

Make cylinders Gilsonite loaded + brushed on Mandrels hot using Castor oil or grafelo to remove, then Varnish Condensite.

Glue (glycerine Possibly) Coated film Celluloid Solvent

Try glue + load Kaolin + put on mandril hot.

Casein in alkali put on Mandril hot also loaded with Kaolin Then Varnish Condensite

Try Pontinak HS SO2 Benzol loaded Kaolin -

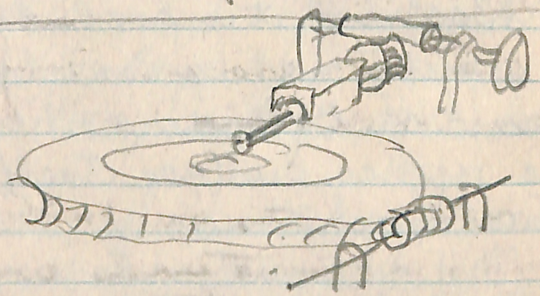
As condensite Varnish requires time to harden + 300° deg it is probable it would not be cured to use it on Cylinders - hence the repeday surface itself must reproduce

Press Cylindrical tube out of Dallys blank material Varnish it + Condense it fully in a die .005 smaller than Mould record, then put in + press.

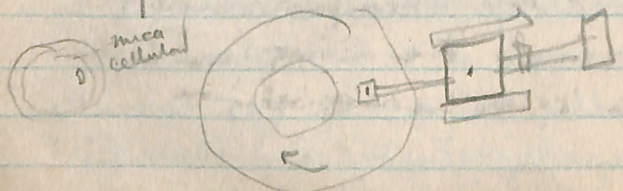
For cleaning working Mould

1 = Conc $ZnCl$.
2 Conc H_2SO_4
3 20% NaOH ½h then CS_2 to form Viscose
4 45% NaOH hot
5 Conc Arsenic acid
6 Hot alcoholic NaOH. Conc Sol soak
7 Hot glacial acetic followed by 45% NaOH / acetic take off lead Res + alcohol. then Water.

Oxalic, Nitric Aq Melted Metaphos acid



Repair Machine



When Ok patent Ford also take Out in England France, Germany Italy.

Cheaper Edyphone records

Matrices Wholly of Ni

Vocal books 1000 Threads

Try very thin Ni some of Hankeys Lay on a discard with blank on + ferrint for rapid "Hots" process. Try Copper if Ni fails.

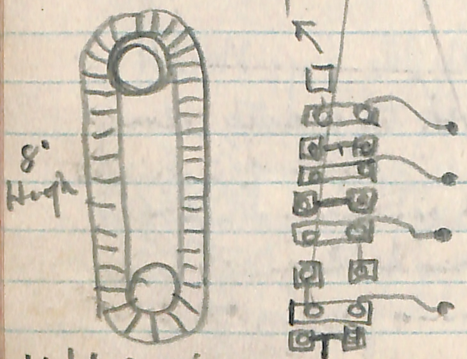
Make some $Ni(OH)_2$ by NaOH + $NiSO_4$ in rolls to potato dry by hot air in rotating Cylinder in 30 min then percolate for Hanley — Dry & Reg test like see Ma per gram —

Gabrielowitch, is a Chamber Music pianoist. Litvinky ditto

Try Soak hard celluloid in Water Containing acetone see if softens.
ditto Camphor in alcohol
" Amyl acetate.

New scheme Moored Balloon Helium filled but Constructed like wind Mill + Connected to a Dynamo using Mooring Cables for Current windless 300 ft or less up. Wind current steady

Varnishing Machine



When Talmadge comes go around with him personally also write out in detail just what Steam Dept does + Reports daily needed

When Le Blanc is familiar Organize Electrical Dept + Reports + write detail duties.

Ask McMullen about the 50 + 100 amp Ni records should have 100th by now.

6000 lbs of Rod discared monthly. Two 6000 lbs Lead lined steam coil Tanks wanted for Exhausting the Nickel Tank lagged to Conserve heat.

Rent discard Ni faced vessels in Crock on hot plate.

Blue Vitriol put in Oct 5

Some H_2SO_4 –

	$CuSO_4$ 47 oz		H_2SO_4 6 oz	
Oct 6	268	Temp		44 60
" 7	238	Crock		93 73
" 8	203	154°		141 25
" 9	163	Tabl		189 28
" 11	126			278 00
" 12	90	water added	–	241 15

On 12th, $NiSO_4$ 6 oz 72 73½

When ready want a full + Complete inventory at each place of Everything Spare obsolete + not Current Running stuff –

After Collection 1 man Keeps this up, all orders not for Current supplies 1st sent to this dept who

Marks on order What he has + if Taken takes it off his books, Ask Co's send account of anything abandoned on account of it + where stored –

Binder board 50 to Cabinet Bogota N.J.

" 454 Tons

Whipping 152 ½ Ton

Find a Customer for old Anodes 8% Ni in –

The old shrapings in bags in Store house will duplex with rapet moulds

Moore rating Tool Mkr.
A first class
B not as good as A
C still lower grade
D Machinist only

Q drouth is aided on by $H_2S + SO_2$ Reacting which makes it not machinable but softens - Look this up & try other Asphalts

Reg Rubber dope ½ H_2S ½ SO_2 Mixed to a dough & dried makes a substance almost like Celluloid hard Cold & Can bend & Cast at 200. Think this will do the business. Think Sulphur also would work or SCl_2 Very PROMISING

Get real babbit & make ½ doz. disc holders abandon wood - put screw on to make Contact.

Inspector for McCheany plant.

Jacobus shows new wkg females average 60 repairs each & old M 36

Speak Manuel about Bookkeeper for Engg Dept & Electrical Dept - Seperate or Combined & what he will do about it & when -

Organize Truck Service - Expense to Shake Telephone to Call from point. Lieberman Report

Liebrman 9 mi. very intelligent
Comes Thursday = Put him
on truck system + study +
Report — also Lang from
Jones dept 154
Temperature of Crock with
Descard: ni faced
154° Fahr

Baling Dept refuses
paper as too busy
We put in bags +
they take em away but
practice burning paper
in Lab boiler —
(Liebrman)

Get a bbl or bag of
Gibsonite 200 @ 300
lbs —

Fire chief to tell me best
device for protection
Flaking plant no
Legends to hurt balls

Truck in Yard 3" wheel
with Tin funnel at door
room End of long bldg
next office —

Lab tells of paper outside
Baling — Dept can handle
by running thru waste
instead of South East

2 + sometimes 3
men on a small
truck 5" wheel
Trucks should be 36" wheels

Bradshaw - phased
Quartermain etc -
Will pay 40 no more

Lang with jones 40 passed
will pay no more.

Read man in Amherst
Recording leaking
See about it ->

Follow up Cunningham
on lowering Temperature
of annealing -

Hoax Smith of EBG
who ordered Pyrometer
Answer questionaire

Try dip dark Ni faced blank in
CuSO4 alone, then with acid
Warm - try various times
then if part that don't do, try flake
Copper acid -

Take black reject put in CuSO4
slightly acid until Coated Copper
then clean & print -

Try Plating Ni over black reject

Try black rejected Ni and as
anode & wipe -

Try strip black reject record
Then hydrogen then Carbonyzes
Conducts & shrinks At 80.
Rubbed off - bring - full red

Run blue flame over surface
burn only instantly & wipe
off - Could rotate & feed
the flame, acetylene flame
fine & fed might 62. 62 lbs

Use records to try on ap of the different Chemicals - Can see Gelatin if attacks Condensite.

Daily brush over lampblack on a blank + print ditto China Clay see how leaves matrix

Put Tin foil on blank + print see how takes impression

Paint over Aluminium powder see how it prints + if Conducts

Paint with slightest trace of any Dichrom in with with the Copper metallic by Zinc reduction or from baths + print see if Conducts -

Dip black m/faced record in 8/4 Cond 20 min see if can remove off -

Try for Cinnoch treating in Reg way a very black deposit by Electrowash 8/4 + plate No 1 100 amp + strip to Examine the 2 faces under Micro see if cleans also if flat

Make Anode in Bichromate Potash - ditto Nitrate Soda Chromic Sulphate -

Try Sodium Amalgam - Oxalate Na -

Press monfall 2½ inch die record surface piece of Peachy + China Clay see how to work -

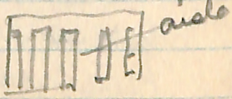
Moment Smith gets Cuprate Mg dry - graphite it + make 2 pockets

Rubber backing boxes 6 bullion dyke in box find if bging made -

Fred Ott break up man Neo Clerk type on flowing Rubber Machine - right away

See Coyle inspector (neutral) in Amberola, says Moore says good man Wolfe place

Select a space in Storage Bat for a general store room for general material not in routine use for all Companies -



Find out from Paulin if prints are filed with all of the 3200 Moulds I sent a note,

When tap Copper baths are removed put Solution in last row of Nickel baths -

Werner - take over Miss England

Go over to Griffith Piano Co + see about Steinway take Horn

Try another shaped horn no flare to amount to anything - possibly Stetho Ear piece - to get more natural, do this at once

Try plating Zinc from ZnSO4 + also from NaOH + KOH solutions on graphite —

Don't give up Cu Cy Ray Dal,

Try Have Hanley make very thin Nickel foil + try it again on a record

ditto Copper

Hurry Moore to increase steam, + also try Babbit bushing welded wood + 30 amperes no contact springs

Go to Silver Lake + find 2 6X4 or 5 wood tanks Lead coil for regenerating Regret Disc Matrices. with steam close by.

Instruct Lieberman + say will get what data he wants tell him another man goes on to do same thing, find out from Jones when Long can take hold —

Give Long Copy of memo I give Lieberman —

Find out from Archer if man who was in garage Wednesday is one of two men + What does — Have Englishman put with archer to learn + do

this 3 or 4 days so & Can put him on nights

Find out if Archer & Night Inspector are on our Lab payroll— Also the intention these are under Executive Com of the E Encorp—

When Charles returns Have him close the Salvage, Harbor men loafing outrageously How many men let off on Service Division

Tell Wm only once over New Moulds or more clean & say they are going twice over now—

Get City water bill McChes & QM & Salvage & E Encorp bill—

Have, Faloon and another man being taught as Inspector close plant, get his name

Allengarten get from Andreason, the names of all men employed & rate for monday next— & Record it in book Then each week Correct the names number & rate.

Use 6 tumblers—

Use water 1/2 height of Cylinder Record— Each tumbler more & more Acetone—

See of Camphor Sol in Glycerine Benzol.

Turpentine

On 16 Oct Total old disc bath holders 1108 on hand + — in 6 lots —

Ordway to assist Inspector to Folsom now 16th Oct

Wharton now goes with Archer in Grinding to be taught pulling in discs $30. wk 6 day 7 days in proportion

One man fixes the rate A B C & D and Mkrs arrange the rate of pay

Investigate inter tracking in Disc Division & Cost number men worked & how to improve

Fix up Disc Max & Min book —

Things have fallen so — no bonus hereafter

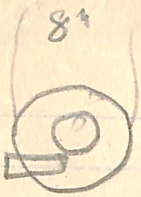
Look at dog new tube plates

Scratch, rejected Records
& Glass in Kasenow Clock
Room or arrange with
Clark under Lock + Clack
to store —

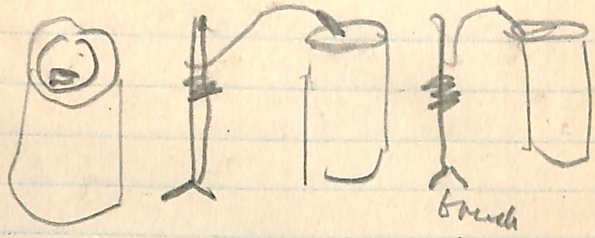
Mr Wister ~~2~~ new books

Ag cells made up
Every Day for split
Tube | lead | —

Write Hoffman + Pattison
to pay especial attention
to Broadshaw ~~reports~~
on handling Moulds



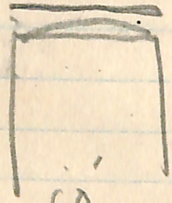
Bench 2" wood



4) 3150 / 787

4) 7 / 1.75

4 in T.



2) 480 / 70

2 Machines 4 Each 1 shift

$1-

220.000

5 4 14

50

400 77 50 13

32 55 55

450- 32 liters

315 25 liters Benzol

37 250 7

259

7 gals - 8 hours

1 gal hour. to take

Care of

13

750-

57 9-

90

40 @ 44- 54

51- 27